



EPA Mid-Atlantic Region  
Penneco Environmental Solutions, LLC UIC Permit  
#PAS2D702BALL “Sedat #4A”(Plum Borough, Allegheny  
County, Pennsylvania) Administrative Record Index

1. Permit Application (August 5, 2021), including all attachments and documents referenced therein
2. “Attachment 1” to final permit – EPA-Approved Plugging and Abandonment Plan
3. Notification of completed Permit Application (August 5, 2021)
4. Draft Permit, Statement of Basis, and Public Notice for Injection Well Sedat #4A
5. Endangered Species Act official species list. U.S. Fish & Wildlife Service. (record search October 15, 2021)
6. Consultation with U.S. Fish & Wildlife Service under Section 7 of the Endangered Species Act (October 15, 2021)
7. Results of Environmental Justice Screening performed by EPA staff (October 20, 2021)
8. Consultation with the Pennsylvania Historical & Museum Commission under the National Historic Preservation Act Section 106 Review (Memo to file, November 1, 2021)
9. “Earthquake Hazard in Pennsylvania”  
[http://elibrary.dcnr.pa.gov/GetDocument?docId=1752494&DocName=ES10\\_EQ\\_Hazard\\_Pa.pdf](http://elibrary.dcnr.pa.gov/GetDocument?docId=1752494&DocName=ES10_EQ_Hazard_Pa.pdf) (Last accessed on March 7, 2022)
10. “Framework for evaluating seismic potential associated with UIC Class II permits” (including all documents cited therein).  
[https://yosemite.epa.gov/oa/eab\\_web\\_docket.nsf/Attachments%20By%20ParentFilingId/0EA8C0D9BA82F48B85257CD9006624C2/\\$FILE/Tab%20I%20seismicity%20framework9-26-13.pdf](https://yosemite.epa.gov/oa/eab_web_docket.nsf/Attachments%20By%20ParentFilingId/0EA8C0D9BA82F48B85257CD9006624C2/$FILE/Tab%20I%20seismicity%20framework9-26-13.pdf) (last accessed on March 7, 2022)
11. Induced Seismicity Potential in Energy Technologies. National Academy Press, 2013. (As referenced in “Framework for evaluating seismic potential associated with UIC Class II permits”)
12. *Information by Region-Pennsylvania; Seismicity and Hazard; All Earthquakes 1900 – Present*; Earthquake Hazards Program. United States Geological Survey (USGS).  
[https://www.usgs.gov/natural-hazards/earthquake-hazards/science/information-region-pennsylvania?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/natural-hazards/earthquake-hazards/science/information-region-pennsylvania?qt-science_center_objects=0#qt-science_center_objects) (last accessed on March 7, 2022)
13. *Minimizing and Managing Potential Impacts of Induced-Seismicity from Class II Disposal Wells: A Practical Approach*. U.S. EPA UIC National Technical Workgroup.

- February 6, 2015. <https://www.epa.gov/sites/default/files/2015-08/documents/induced-seismicity-201502.pdf> (last accessed on March 7, 2022)
14. “The SW-846 Compendium”. EPA. <https://www.epa.gov/hw-sw846/sw-846-compendium> (last accessed on March 7, 2022)
  15. Maximum Allowable Injection Pressure (MAIP) calculation memo to file (March 31, 2022)
  16. Plum Injection Well Revocation Request Letter, Fair Shake Environmental Legal Services (December 15, 2021)
  17. EPA Response to Revocation of Plum Injection Well Permit Request Cover Letter (May 5, 2022)
  18. EPA Response to Revocation of Plum Injection Well Permit Request Enclosure (May 5, 2022), (attachments referenced therein can be found with entry 23 of this record)
  19. EPA Memorandum: “Rescission of the January 2021 Guidance Document, “Applying the Supreme Court’s *County of Maui v. Hawaii Wildlife Fund* Decision in the Clean Water Act Section 402 National Pollutant Discharge Elimination System Permit Program”. [https://www.epa.gov/system/files/documents/2021-09/maui-rescission-memo\\_final-09.15.2021.pdf](https://www.epa.gov/system/files/documents/2021-09/maui-rescission-memo_final-09.15.2021.pdf) (last accessed April 12, 2023)
  20. *Halliburton Cementing Tables*. Halliburton Company. 1981. (physical copy, not available for free on the web)
  21. Penneco Environmental Solutions, LLC UIC Permit #PAS2D701BALL “Sedat 3A” (Renton Gas Field, Plum Borough, Allegheny County, Pennsylvania) Administrative Record Index including all documents listed therein (April 25, 2018)
  22. “Sedat #3A Comment-Response”. Pennsylvania Department of Environmental Protection (April 14, 2020)
  23. All material related to the modifications of Penneco Environmental Solutions, LLC UIC Permit #PAS2D701BALL for “Sedat #3A” (April 16, 2020)
  24. *Drinking Water - EPA Program to Protect Underground Sources from Injection of Fluids Associated With Oil and Gas Production Needs Improvement*, United States General Accountability Office (GAO), June 2014.
  25. *In Ohio, Regulators Respond to Suspected Frack Waste Spewing from Unused Gas Well, Causing Fish Kill*, StateImpact Pennsylvania, February 5, 2021.

26. *Study: Fracking Didn't Impact West Virginia Groundwater, But Wastewater Spills Pollute Streams*, StateImpact Pennsylvania, April 24, 2017.
27. *EPA Legal Tools to Advance Environmental Justice*, EPA, May 2022.
28. *Drilled Too Far: The Perils of Injection Wells*, Food & Water Watch, June 2020.
29. *2nd Injection Well Project in Plum Faces Opposition from Residents, Borough Officials*, Joyce Hanz, TribLive, December 10, 2021.
30. *Methane in Well Water: Frequently Asked Questions*, United States Agency for Toxic Substances and Disease Registry (ATSDR), May 2016.
31. A Citizen's Guide to Radon, United States Environmental Protection Agency, May 20, 2012, [A citizens guide to radon.pdf \(epa.gov\)](#) (last accessed on August 4, 2023).
32. What is Radon?, United States Environmental Protection Agency, January 17, 2023, <https://www.epa.gov/radon/what-radon> (last accessed on August 3, 2023).
33. TENORM: Oil and Gas Production Wastes, United States Environmental Protection Agency, January 30, 2023, <https://www.epa.gov/radiation/tenorm-oil-and-gas-production-wastes> (last accessed on August 3, 2023).
34. *Who's to blame for oil waste in Californians' drinking water?*, NRDC, February 9, 2015.
35. *Injection Wells: The Poison Beneath Us*, Abrahm Lustgarten, ProPublica, June 21, 2012.
36. *The geochemistry of naturally occurring methane and saline groundwater in an area of unconventional shale gas development*, Jennifer S. Harkness et al., *Geochimica et Cosmochimica Acta*, April 5, 2017.
37. *The integrity of oil and gas wells*, Robert B. Jackson, *Proceedings of the National Academy of Sciences (PNAS)*, July 29, 2014.
38. Pennsylvania Department of Environmental Protection Client Database, Penneco Environmental Solutions, Inc., Sedat #3A Well, [eFACTS on the Web \(pa.gov\)](#), last accessed on August 16, 2023.
39. Email subject: Pittsburgh Post-Gazette News Article from 2017. Last message dated July 25, 2023.
40. Email chain subject: Complaint #357914. Last message dated July 6, 2023.
41. Email chain subject: Water Supply Investigation 357914 Determination, last message dated June 22, 2023, with attachment letter subject: Water Supply Request for Investigation 357914, dated April 18, 2022.

42. Email chain subject: Sedat #3A UIC Water Supply Impact Inquiry - DEP NOV & Penneco Response with attachment letter subject Notice of Violation (NOV) 39664 and Associated Inspection Report 3224342 (dated November 10, 2021) and attachment letter subject Notice of Violation 39664 and Associated Inspection Report 3224342 (dated November 23, 2021). Last message dated June 22, 2023.
43. Email chain subject: Drinking Water Complaint. Last message dated August 16, 2023.
44. Email subject: Final Sedat 4A UIC Well Zone of Influence ZEI 072221, with attachment letter subject: Zone of Endangering Influence (ZEI) Modeling, dated July 21, 2021. Last message dated May 25, 2023.
45. Email subject: Penneco Sedat 3A with attachment email subject: Sedat #3A 2-Year MIT (dated June 5, 2023, and attachment subject Underground Injection Control Class II Well Inspection Report (dated June 22, 2023). Message dated July 7, 2023.
46. Email chain subject: DEP Letter of Negative Impact Related to Stray Gas Investigation with attachment letter subject Water Supply Request for Investigation 359730 (dated September 22, 2022). Last message dated June 22, 2023.
47. *Dangerous and Close Fracking Puts the Nation's Most Vulnerable People at Risk*, Elizabeth Ridlington *et al.*, Environment America Research & Policy Center, Fall 2016.
48. *Fracking Fumes: Air Pollution from Hydraulic Fracturing Threatens Public Health and Communities*, Tanja Srebotnjak and Miriam Rotkin-Ellman, NRDC Issue Brief, December 2014.
49. *Potential Health and Environmental Effects of Hydrofracking in the Williston Basin, Montana*, Joe Hoffman, Geology and Human Health, undated.
50. *Hydraulic Fracturing for Oil and Gas: Impacts from the Hydraulic Fracturing Water Cycle on Drinking Water Resources in the United States*, EPA, December 2016, <https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990>, last accessed on August 22, 2023.
51. *Oil and gas wells and their integrity: Implications for shale and unconventional resource exploitation*, Richard J. Davies *et al.*, *Marine and Petroleum Geology*, September 2014.
52. *Radium Content of Oil- and Gas-Field Produced Waters in the Northern Appalachian Basin (USA): Summary and Discussion of Data*, E.L. Rowan *et al.*, US Geological Survey, 2011.
53. *Endocrine disrupting activities of Surface water associated with a West Virginia oil and gas industry wastewater disposal site*, Christopher D. Kassotis *et al.*, University of Missouri, April 10, 2016.
54. Technical Review Control and Disposal Plan Penneco Environmental Solutions, LLC EPA UIC Permit # - PAS2D701BALL Sedat #3A Project, memorandum, Kevin Maskol,

- Pennsylvania Department of Environmental Protection, April 13, 2020.
55. *Considerations for development of Marcellus Shale gas*, J. Daniel Arthur *et al.*, World Oil, July 2009.
  56. *Keystone Secrets: Records Show Widespread Use of Secret Fracking Chemicals is a Looming Risk for Delaware River Basin, Pennsylvania Communities*, Dusty Horwitt, Partnership for Policy Integrity, September 11, 2018.
  57. *Report 1 of the Forty-Third Statewide Investigating Grand Jury*, Pennsylvania Office of Attorney General, June 22, 2022.
  58. *Harmful chemicals and unknowns haunt Pennsylvanians surrounded by fracking*, Kristina Marusic, Environmental Health News, March 1, 2021.
  59. *Proximity to fracking sites associated with risk of childhood cancer*, Xiaomei Ma *et al.*, Yale Health News, August 17, 2022.
  60. *PFAS used in fracking fluids in US, report says*, Cheryl Hogue, C&EN Global Enterprise, July 19, 2021 (Report not reviewed because this required accepting tracking markers.).
  61. EPA Region 3 Clarification of Maps Required for Class II Permit Application (undated).
  62. All public comments on the draft permit and their correspondence.
  63. Final Response to Comments on the draft permit PAS2D702BALL.
  64. Virtual Public Hearing Transcript (June 28, 2022).
  65. In-Person Public Hearing Transcript (August 30, 2022).
  66. Email Message Announcing Public Notice of PAS2D702BALL Draft Permit Sent to Region 3 UIC Mailing List and Borough Managers, including attached Public Notice document (July 28, 2022).
  67. Proof of First Public Notice in *Pittsburgh Post-Gazette* (May 26, 2022).
  68. Proof of Second Public Notice in *Pittsburgh Post-Gazette* (July 28, 2022).
  69. Letters sent out for Initial Public Notice of Draft Permit.
  70. Email Message Announcing the Final Permit of PAS2D702BALL Sent to All Commenters (September 21, 2023).
  71. *Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes*, 53 FR 25446, (July 6, 1988).  
<https://archive.epa.gov/epawaste/nonhaz/industrial/special/web/txt/ogreg88.txt>, last

accessed on April 10, 2024.

72. Revised Notice of Final Permit Issuance (March 7, 2024).

73. Final Permit PAS2D702BALL.